

GREEN AND SOCIAL BONDS: A HIGH-LEVEL MAPPING TO THE SUSTAINABLE DEVELOPMENT GOALS



June 2018 Edition

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Introduction

This document aims to provide a broad frame of reference by which issuers, investors and bond market participants can evaluate the financing objectives of a given Green, Social or Sustainability Bond/Bond Programme against the [Sustainable Development Goals \(SDGs\)](#). Developments in international policy over the last few years have brought about a momentum within the global capital markets to establish a link between investments and achieving the SDGs. In response to this growing momentum, there have been several efforts made by a number of institutions and bodies to present approaches which adapt the SDGs to an investable context. This guide has been created for public and private sector issuers and investors to review their green, social and sustainability bond issuances and investments against the SDGs.

The mapping exercise contained herein complements the [Green Bond Principles \(GBP\)](#), [Social Bond Principles \(SBP\)](#) and the [Sustainability Bond Guidelines \(SBG\)](#) (the “Principles”) in promoting the increase of bond financing that contributes to the mitigation of climate change and amelioration of social challenges globally. This document may be considered alongside other documents published in the Principles Resource Center particularly: [Working Towards Harmonized Framework for Impact Reporting for Green Bonds \(2015\)](#), and various guidance on waste water and resource efficiency¹ which comprehensively aim to aid the disclosure of impact reporting and expected outcomes of projects financed through green, social and sustainability bonds. In addition, users of this document may benefit from the spreadsheet [supplement](#) which includes a more detailed listing of SDG targets mapped to the eligible categories of the Principles and is designed to be complementary to this guidance.

Background

A tremendous amount of financing is required to realise the Sustainable Development Goals. Investment in infrastructure development alone—a key bottleneck to economic transformation and sustainable growth—faces financing needs at the global level of \$5 trillion to \$7 trillion per year². These investments are expected to open up \$12 trillion of market opportunities as well as create 380 million new jobs.³ Currently, private investment accounts for up to half of total infrastructure spending of \$1 trillion to \$1.5 trillion a year⁴. Conversely, almost \$100 trillion of funds are managed by institutional investors in OECD countries, of which only a minor percentage is invested in sustainable assets⁵. Green, Social and Sustainability Bonds, as traditional financial instruments with an emphasis

¹ Suggested impact reporting metrics for [Waste Management and Resource-Efficiency Projects](#) and [Sustainable Water and Wastewater Management Projects](#)

² Intergovernmental Committee of Experts on Sustainable Development Financing, 2014

³ [Better Business, Better World Report](#), The Business & Sustainable Development Commission, January 2017

⁴ [Financing Change](#), McKinsey, January 2016

⁵ Institutional Investors: The Unfulfilled \$100 Trillion Promise – The World Bank

on sustainability, are helping to channel investment to sustainable infrastructure, essential services, and beyond. These instruments have begun to unlock increased investment from bond investors.

Green, Social and Sustainability Bonds are any type of bond instrument where the proceeds will be exclusively applied to eligible environmental and social projects or a combination of both:

- Green Bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance projects with clear environmental benefits and which are aligned with the four core components of the GBP. Eligible green projects include renewable energy, energy efficiency, pollution prevention and control, eco-efficient and/or circular economy adapted products, production technologies and processes, green buildings, terrestrial and aquatic biodiversity conservation, clean transportation etc⁶.
- Social Bonds finance projects that directly aim to address or mitigate a specific social issue and/or seek to achieve positive social outcomes, especially but not exclusively for a target population(s). For the avoidance of doubt, it is acknowledged that the definition of target population can vary depending on local contexts and that, in some cases, such target population(s) may also be served by addressing the general public. Social Project categories include providing and/or promoting: affordable basic infrastructure, access to essential services, affordable housing, employment generation, food security, or socioeconomic advancement and empowerment.⁷
- Sustainability Bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance a combination of green and social projects and which are aligned with the four core components of the GBP and/or SBP.

Green, Social and Sustainability Bonds are regulated instruments subject to the same capital market and financial regulation as other listed fixed income securities.

Rationale

Since the SDGs were launched in 2015, they have been increasingly accepted and applied in the financial markets as Environmental, Social and Governance (ESG) and impact investing are becoming mainstream. Large asset owners are starting to set targets for SDG-aligned investments. The Global Impact Investing Network reported that 60% of impact investors stated that they actively track or plan to track the financial performance of their investments with respect to the SDGs⁸. In addition, MSCI's survey of investors revealed that the SDGs are clearly emerging as the dominant framework around which to organize investing for impact. Many surveyed indicated that stakeholders were explicitly pressing them to consider the SDGs in the investing process. Investors that had been investing for impact prior to the SDGs indicated that they saw a growing necessity to report and frame their activities around the SDGs⁹.

⁶ Refer to Green Bond Principles 2018



⁷ Social Bond Principles 2018

⁸ [2017 Global Impact Investing Network \(GIIN\) survey](#) of around 200 impact investors managing \$114 billion

⁹ [MSCI Sustainable Impact Guide, Dec 2017](#)

MAPPING TABLE

The table below illustrates how the SDGs may be considered by both the private and the public sectors as they identify eligible operations for Green, Social, and Sustainability bond use-of-proceeds. The table is a result of a high level review of each of the 169 targets associated with the 17 goals in order to identify those that may be relevant to either the GBP or the SBP project categories.¹⁰ Thus far, 15 of the SDGs have been identified as being relevant to the Principles. It is important to note that this table is meant to serve as a reference and that projects should be reviewed individually for alignment. Moreover, alignment with the SDGs does not automatically ensure alignment with the Principles. Several indicators included as reference below are from the [SDG Impact Indicators: A Guide for Investors and Companies](#) by the Sustainable Finance Platform.¹¹ The indicators are neither comprehensive nor prescriptive. Issuers should identify the SDGs that correspond with their work and consider these and other indicators as they align with their strategies and national, regional, or legal circumstances.






SDG	SBP Project Categories ¹²	GBP Project Categories ¹³	Example Indicators
	<ul style="list-style-type: none"> • Access to Essential Services (1.4) • Affordable Housing (1.4) • Socioeconomic Advancement and Empowerment (1.1, 1.2, 1.3, 1.4, 1.5) 	<ul style="list-style-type: none"> • Climate Change Adaptation (1.5) 	<p>1.1 Number of products and services serving low-income groups</p> <p>1.2 Number of people provided with access to financial services, including microfinance</p> <p>1.4 Number of people provided access to clean energy</p>
	<ul style="list-style-type: none"> • Access to Essential Services (2.3) • Affordable Basic Infrastructure (2a) • Food Security (2.1, 2.2, 2.3, 2c) • Socioeconomic Advancement and Empowerment (2.3, 2.5, 2a, 2c) 	<ul style="list-style-type: none"> • Climate Change Adaptation (2.4) • Environmentally Sustainable Management of Living Natural Resources and Land Use (2.4) • Terrestrial and Aquatic Biodiversity Conservation (2.5) 	<p>2.1 Number of people provided with safe, nutritious and sufficient food</p> <p>2.2 Ecologically sustainable agricultural production per hectare (tonnes)</p> <p>2.4 Products with certified improvements in nutritional value</p> <p>2.4 Number of people and/or enterprises (e.g. companies or farms) benefitting from measures to mitigate the consequences of floods and droughts</p>

¹⁰ For the full list of the 169 SDG targets, see <https://sustainabledevelopment.un.org/sdgs>.

¹¹ The [Sustainable Finance Platform](#) is a cooperative venture of De Nederlandsche Bank (chair), the Dutch Banking Association, the Dutch Association of Insurers, the Federation of the Dutch Pension Funds, the Dutch Fund and Asset Management Association, the Netherlands Authority for the Financial Markets, the Ministry of Finance, the Ministry of Infrastructure and the Environment, and the Sustainable Finance Lab.





¹² The most relevant associated targets are listed in parenthesis.

¹³ The most relevant associated targets are listed in parenthesis.

SDG	SBP Project Categories ¹⁴	GBP Project Categories ¹⁵	Example Indicators
 <p>3 GOOD HEALTH AND WELL-BEING</p>	<ul style="list-style-type: none"> • Access to Essential Services (3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.8, 3b, 3c) • Affordable Basic Infrastructure (3.6) 	<ul style="list-style-type: none"> • Pollution Prevention and Control (3.9) • Renewable Energy (3.9) 	<p>3.1 Number of people reached with improved health care</p> <p>3.2 Cost reduction for standard treatments and medicines</p> <p>3.3 Amount of wastewater treated, reused or avoided before and after the project</p> <p>3.3 Amount of raw/untreated sewage sludge that is treated and disposed of</p>
 <p>4 QUALITY EDUCATION</p>	<ul style="list-style-type: none"> • Access to Essential Services (4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4a, 4c) • Socioeconomic Advancement and Empowerment (4.4, 4.5) 		<p>4.1 Number of people receiving education services</p> <p>4.2 Number of students attaining standard for education level</p> <p>4.3 Education facilities for inclusive and effective learning environments</p>
 <p>5 GENDER EQUALITY</p>	<ul style="list-style-type: none"> • Access to Essential Services (5.4) • Socioeconomic Advancement and Empowerment (5.1, 5.4, 5.5, 5b) 		<p>5.1 Number of equal paying jobs created for women and other under-represented gender groups</p> <p>5b. Number of women using technology products</p>
 <p>6 CLEAN WATER AND SANITATION</p>	<ul style="list-style-type: none"> • Affordable Basic Infrastructure (6.1, 6.2, 6.3, 6.4, 6b) 	<ul style="list-style-type: none"> • Sustainable Water and Waste Water Management (6.1, 6.2, 6.3, 6.4, 6.5, 6a, 6b) • Terrestrial and Aquatic Biodiversity Conservation (6.6) 	<p>6.1 Number of people provided with safe and affordable drinking water</p> <p>6.2 Number of people provided with adequate and equitable sanitation</p> <p>6.3 Volume of water saved</p> <p>6.4 Volume of wastewater treated for reuse</p> <p>6.6 Area covered by sustainable land and water resources management practices</p>
 <p>7 AFFORDABLE AND CLEAN ENERGY</p>	<ul style="list-style-type: none"> • Affordable Basic infrastructure (7.1, 7b) 	<ul style="list-style-type: none"> • Energy Efficiency (7.3, 7a) • Renewable Energy (7.2, 7a) 	<p>7.1 Renewable energy produced</p> <p>7.2 Avoided greenhouse gas emissions (tonnes CO²eq)</p> <p>7.3 Number of people with access to clean energy services</p>





¹⁴ The most relevant associated targets are listed in parenthesis.

¹⁵ The most relevant associated targets are listed in parenthesis.

SDG	SBP Project Categories ¹⁶	GBP Project Categories ¹⁷	Example Indicators
	<ul style="list-style-type: none"> • Access to Essential Services (8.3, 8.6, 8.10) • Employment Generation (8.2, 8.3, 8.5, 8.6, 8.9) • Socioeconomic Advancement and Empowerment (8.3, 8.5, 8.6, 8.7, 8.8) 	<ul style="list-style-type: none"> • Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes (8.4) • Energy Efficiency (8.4) • Renewable Energy (8.2) 	<p>8.1 Number of loans, deposits or insurance products in line with SDGs or number of people provided these</p> <p>8.2 Number of jobs created</p> <p>8.3 Number of jobs retained</p>
	<ul style="list-style-type: none"> • Access to Essential Services (9.3, 9c) • Affordable Basic infrastructure (9.1, 9a, 9c) • Employment Generation (9.2) 	<ul style="list-style-type: none"> • Energy Efficiency (9.4) • Renewable Energy (9.1) 	<p>9.1 Length of sustainable road construction with equitable access</p> <p>9.2 Length of rail construction</p> <p>9.3 Number of first-time internet connections</p> <p>9.4 R&D expenditure in line with SDGs as % of sales</p>
	<ul style="list-style-type: none"> • Access to Essential Services (10c) • Socioeconomic Advancement and Empowerment (10.1, 10.2, 10.3, 10.7) 		<p>10.1 Number of jobs created in low-income areas, among disadvantaged groups and other target populations</p> <p>10.2 Number of local SME suppliers and smallholder farmers in supply chain</p>
	<ul style="list-style-type: none"> • Affordable Basic infrastructure (11.1, 11.2) • Affordable Housing (11.1) • Socioeconomic Advancement and Empowerment (11.5) 	<ul style="list-style-type: none"> • Clean Transportation (11.2) • Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes (11b) • Environmentally Sustainable Management of Living Natural Resources and Land Use (11.7, 11a) • Green Buildings (11c) • Pollution Prevention and Control (11.6) • Renewable Energy (11.3) • Sustainable Water and Waste Water Management (11.5) • Terrestrial and Aquatic Biodiversity Conservation (11.4) 	<p>11.1 Number of people with access to safe, affordable and sustainable housing</p> <p>11.2 Number of people with access to sustainable transport systems</p> <p>11.2 Number of electric vehicles deployed</p> <p>11.2 Number of electric vehicle charging points installed</p> <p>11.3 Floor space of green real estate</p> <p>11.6 Waste that is prevented, minimised, reused or recycled before and after the project</p> <p>11.6 Number of people benefitting from selective collection of recyclables</p>

¹⁶ The most relevant associated targets are listed in parenthesis.

¹⁷ The most relevant associated targets are listed in parenthesis.

SDG	SBP Project Categories ¹⁸	GBP Project Categories ¹⁹	Example Indicators
	<ul style="list-style-type: none"> • Food Security (12.3) 	<ul style="list-style-type: none"> • Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes (12.5) • Environmentally Sustainable Management of Living Natural Resources and Land Use (12.2) • Pollution Prevention and Control (12.3, 12.4, 12.5) • Renewable Energy (12.4) • Sustainable Water and Waste Water Management (12.2, 12.5) 	<p>12.1 Avoided resource waste</p> <p>12.2 Avoided emissions to air (other than greenhouse gases)</p> <p>12.3 Avoided emissions to water</p> <p>12.4 Materials sourced sustainably or recycled</p> <p>12.4 Absolute or % reduction in local pollutants</p> <p>12.5 Reduction of hazardous materials used</p>
		<ul style="list-style-type: none"> • Climate Change Adaptation (13.1, 13.2, 13.3, 13b) • Climate Change Mitigation (13.1, 13.3) • Renewable Energy (13.1) 	<p>13.1 Water storage capacity</p> <p>13.1 Reduction in weather-related disruption (days p.a. and/or risk frequency (%))</p> <p>13.2 Flood-resilient floor space</p> <p>13.3 High-risk assets with climate insurance cover</p>
	<ul style="list-style-type: none"> • Socioeconomic Advancement and Empowerment (14b) 	<ul style="list-style-type: none"> • Environmentally Sustainable Management of Living Natural Resources and Land Use (14.4, 14.6, 14a, 14b) • Terrestrial and Aquatic Biodiversity Conservation (14.1, 14.2, 14.3, 14.5, 14.6, 14a) 	<p>14.1 Avoided or reduced marine and fresh water pollution (ecotoxicity, eutrophication)</p> <p>14.2 Biodiversity loss avoided or reduced (# of species)</p>
		<ul style="list-style-type: none"> • Environmentally Sustainable Management of Living Natural Resources and Land Use (15.7, 15.8, 15a, 15c) • Terrestrial and Aquatic Biodiversity Conservation (15.1, 15.2, 15.3, 15.4, 15.5, 15b) 	<p>15.1 Avoidance or reduction of land pollution (ecotoxicity, acidification, salinization, transformation)</p> <p>15.2 Avoidance or reduction of biodiversity loss (# of species)</p> <p>15.3 Certified afforested or reforested land</p> <p>15.3 Area covered by sustainable land and water resources management practices</p>

¹⁸ The most relevant associated targets are listed in parenthesis.

¹⁹ The most relevant associated targets are listed in parenthesis.

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Contact details

ICMA Paris Representative Office
62 rue la Boétie
75008 Paris
France

Tel: +33 1 70 17 64 70

greenbonds@icmagroup.org

socialbonds@icmagroup.org

sustainabilitybonds@icmagroup.org

www.icmagroup.org